Society Proceedings.

NEW YORK NEUROLOGICAL SOCIETY.

January 6, 1903.

The President, Dr. Pearce Bailey, in the chair.

A Marked Case of Exophthalmic Goiter.—Dr. J. Arthur Booth presented a married woman, twenty-four years of age, exhibiting exophthalmic goiter to a marked degree. The symptoms had appeared four years ago, the right eye being first affected. She presented the rapid pulse and nervous symptoms characteristic of this disease. Dr. Booth purposed having the sympathetic exsected on each side, and would report upon the case later.

Dr. M. Allen Starr said that the tension of the patient's pulse was very high, and the pulse itself was small. This interested him, because in the majority of cases he had seen there had been a decided diminution of arterial tension. This had suggested to him the propriety of using thyroid in cases of high arterial tension, especially in arteriosclerosis and allied conditions. Of late, he had tried this, and had been pleased with the results.

Dr. William M. Leszynsky said that in a recent journal article the statement had been made that the goiter would be practically obliterated for the time being if the patient, while lying down, made an effort to draw the head forward. The pressure of the sternomastoid and other muscles seemed to cause a complete obliteration of the goiter. He had tried this experiment in two cases, with the results stated.

Dr. Booth said that at one time he had been of the opinion that many of these cases presented a high tension pulse, and many of them seemed to be helped by aconite, yet this condition did not seem to prevail in the majority of cases. He had not tried the experiment spoken of by Dr. Leszynsky. He had seen four operations for excision of the sympathetic done, and in two of them the effect on the goiter and on the pulse was prompt and very marked.

Dr. W. B. Noyes said that this operation was certainly a very dangerous one. He had recently had a patient operated upon in this way at St. Luke's Hospital. The operation was rather prolonged, and the patient died on the table without the usual signs of shock.

Dr. Booth said he had been present at that operation, and the case had impressed him as being a very bad one for this operation.

A Peculiar Affection of the Terminal Phalanges of the Hands.—This case was presented by Dr. B. Onuf. The affection first began about eleven years ago, some thickening of the terminal phalanx of the middle finger of one hand being first noticed. The corresponding finger of the other hand was next affected, and gradually the disease involved the other phalanges. Subsequently the nails presented transverse ridges, and became very brittle. At the present time, there was very marked thickening of the terminal phalanx of the thumb, and all of the terminal phalanges were in a state of semi-flexion, and showed moderate thickening. There was no specific history, and the examination of the lungs was negative. There was nothing pointing to syringomyelia. Several radiographs of the case were presented. These showed that there was almost complete absorption of the entire terminal phalanx of the thumb and of the middle and index fingers. A radiograph of the foot showed similar changes, though less marked. The disease appeared to Dr. Onuf to be a degenerative one. Radiographs of five phthisical patients having clubbed fingers had been studied by him, but they showed nothing like the same changes as the case just presented.

Dr. Starr said that about seven years ago he had taken photographs of a woman at his clinic who presented a similar condition. The case was not understood at the time, and the photographs were taken because it was considered a curiosity.

Spastic Paraplegia.—Dr. George A. Lawrence presented specimens from a case of spastic paraplegia that he had under observation since November 9, 1895. The patient gave a history of scarlet fever and of dorsal Pott's disease in early childhood. He was able to attend to business until the summer of 1895, when he fell downstairs and became unconscious. This was followed by severe epileptiform seizures. Examination showed no paresthesia or anesthesia, but there were marked ankle-clonus and fibrillary twitchings of the muscles in the legs, with jerking of the limbs at night. The man received iodide of potassium in doses as high as 200 grains, three times a day, and also strychnine sulphate in doses varying from 1-100 to 1-50 of a grain. He improved greatly under this treatment, and by the fall of 1896 was going to business. In the following March there was another exacerbation. In September, 1898, he was able to return to business. On March 15, 1899, there was considerable pain in the chest and a drawing up of the limbs was still more marked. In October of that year there were marked fibrillary twitchings of the muscles of the legs and thighs. In December, 1900, there was another exacerbation. On October 2, 1902, the upper extremities were becoming involved, and the patient was growing emotional. On December 1 the heart action and breathing were rapid, and he was exceedingly nervous. On December 26, 1902, death occurred. A post-mortem examination of the brain and spinal cord was alone permitted. This was made by Dr. Strong and Dr. Lawrence the following morning. The spinal canal was found to have been encroached upon at the site of the old kyphosis, and there was much thickening of the anterior surface of the dura mater. The anatomical diagnosis was spastic paraplegia due to a chronic myelitis. The microscopical examination had not yet been made.

Address of the Retiring President.—Dr. Joseph Collins, in retiring from the chair, reviewed the scientific work of the society during the two years he had been its president.

Inaugural Address of the President.—Dr. Pearce Bailey selected as the theme for his address, "Fracture at the Base of the Skull." He said that from the uniformity in localizing signs the conclusion was that the brain lesion accompanying this fracture must also be quite constant. Neurological examinations were often made with difficulty, because the patient was comatose. The cranial nerve injuries were usually multiple and came on immediately, or within a few hours. When appearing still later they were difficult of explanation. Paralysis of the olfactory nerve was sometimes the only focal symptom, but it was usually absent altogether. Blindness and amblyopia in fractures of the base were usually due to fracture extending into the optic canal. It was probable that amblyopia might also be caused by hemorrhages at the base of the skull, which push their way into the optic canal and compress the nerve. Visual disturbances following fractures were always alarming symptoms. Traumatic affections of the optic nerve were frequently accompanied by oculomotor palsies. The frequency with which the third, sixth and fourth nerves were involved was in the order named. The sixth nerve and the seventh were often injured, and this was commonly associated with deafness. It was rare for oculomotor palsies to persist longer than a few months. In most of the cases of traumatic ptosis that he had seen there had usually been sufficient weakness of the affected eyelid to enable one to determine which lid had been involved. Generally the dilated pupil corresponded with the side having the greater brain injury. Of five cases presenting equally dilated pupils only one recovered. The facial was the most frequently involved single nerve. Paralysis of the extremities showed itself more commonly as a weakness or as a hemiplegia. Paraplegia proved almost invariably fatal. The knee-jerks were frequently diminished or lost at first, but later returned, and might even become over-active. Convulsions were very rare in fractures at the base. From the initial profound coma a large number of persons who die never emerge, but profound and persistent coma was rare in cases which recover. The most characteristic mental state in these cases was semicoma. A fatal result was to be looked for in more than one-half of the cases of fracture at the base. A collection of 494 cases showed a mortality of 57 per cent. In probably 95 per cent of the fatal cases death occurred within five days of the receipt of the injury. Age did not seem to be an important feature in prognosis. Alcoholism affected profoundly both the immediate and ultimate prognosis. With regard to the ultimate prognosis, the speaker said that the literature on this subject was meagre. He had been able to obtain the ultimate result in 14 out of his 28 cases. In all of the cases there was a period of at least one year after the injury. In general, it might be said that in the majority of cases the patient would be as well as before the injury at the end of the first year. In a certain small proportion of cases, however, there were certain changes in disposition or mentality. Irritability of temper, quarrelsomeness, headache and diminished resistance to alcohol were noted in some of those suffering from diseases, such as Bright's disease, which affect the arteries. Epilepsy did not seem to be a consequence of fracture at the base of the skull. If brain injury figured in the etiology of insanity, such patients should be found in insane asylums. It was probable that there were 500 cases of fracture at the base occurring annually in New York city, and that in 150 of these cases recovery occurred; hence, if such an injury were a common cause of insanity these persons would be found in the insane hospitals of this vicinity. Dr. A. E. Macdonald had kindly investigated this question for Dr. Bailey at the Manhattan State Hospital, but had been unable to find more than one such patient in a thousand. The conclusion seemed to be that fracture at the base was a negligible quantity in the etiology of insanity.

The Daily Rhythm of Epilepsy and its Interpretation.—Dr. L. Pierce Clark read this paper. He said that in 1897 he had collected and tabulated 9,545 eqileptic seizures by hours. The greatest number of seizures occurred at 4 a. m. Since then he had collected cases occurring in both sexes at the Craig Colony, and had tabulated 150,000 epileptic seizures. During the greater part of this study sedative treatment was at a minimum. The great majority of the patients were in bed, in the first group, and slept from 7.30 p. m to 5.30 a. m. There were three fairly marked curves; that of early night, or 9 p. m.; that of early morning, or 4 a. m., and that of noon. Another class studied was among the out-door workers at the colony. The three main curves were much the same as in the other group, and, as in that group, there were fairly marked secondary curves at 9 a. m. and 5 p. m. In another chart, comprising the whole of the 150,000 seizures, the secondary curves were still more apparent. It was found that the seizures were about equally divided between the day and night. Sleep was deepest during the first hour, then became lighter for an indefinite period, and then deepened again and lightened once more about one hour before awakening. In certain cases in which deep and perfect sleep did not come at once various crises occurred. During the deepest sleep of the epileptic he had never been able to elicit the knee reflexes without adopting sufficiently harsh measures to awaken the person. The bromides diminish the afferent impulses to the cerebral cortex, and are aids to cerebral inhibition. At noon the epileptic became fatigued and was in a condition comparable to light sleep. Moreover, at this time the heaviest meal was taken, and auto-intoxication was at the maximum. Epileptics should not be idle; they should have a simple but not a monotonous occupation. This study showed that the twenty-four hours were roughly divided into eight-hour periods.

Dr. B. Sachs asked for further information regarding rhythm in the individual epileptic; also if one of the reasons the attacks were so apt to occur in the early morning hours, was that the air of the sleeping apartment was especially vitiated at this time. He would also like to know if it were safe for epileptics to engage in occupations which would place them in danger should a seizure occur.

Dr. M. Allen Starr said that he had noticed that in the individual there was a tendency for the seizure to return at a certain hour. He had just seen a patient who for sixteen years had never had the attack except between six and seven o'clock in the morning, but who for the first time yesterday had had an attack in the afternoon. This fact seemed to him of some importance in the treatment. Attacks occurring in the early morning hours seemed to point to a weakened circulation in the brain, and hence in such cases he was disposed to combine such remedies as digitalis and strophanthus with the bromides. In some of these cases he thought benefit was derived from awakening the patient early in the morning and giving some hot stimulant.

Dr. W. M. Leszynsky said that in cases of nocturnal epilepsy the rhythm had been considerably changed by the bromide treatment. The attacks would often disappear at night and occur in the daytime, when they had not been so before this treatment was instituted. Mention was made of a man whose attacks had always been at night, while taking bromide at night, and whose attacks first appeared in the daytime when the bromides were given during the day.

Dr. J. Arthur Booth said that he, too, had observed this change in the rhythm as a result of treatment.

Dr. I. Abrahamson asked if Dr. Clark had made any investigations on the metabolism and blood pressure at the time of maximum seizures.

Dr. Smith Ely Jelliffe said that recent investigations on blood pressure had shown that it was at a minimum in the early morning hours. It had been claimed that there was more or less rhythm in the leucocyte count at the different periods of the twenty-four hours.

Dr. Clark said that there was no doubt that investigation of the metabolism and blood pressure would show them to go hand in hand with that condition expressed only too indefinitely by the term "auto-intoxication." Alterations in blood pressure, he thought, varied with the depth of sleep. The rhythm of the epileptic seizures were certainly greatly influenced by treatment, as well as by diet, exercise and other things. He had known many epileptics to carry on the trade of carpenter for a long time without meeting with any accident, but the latter was prone to come when they became so accustomed to their work as to relax their guard.